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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/621,418	07/18/2003	Patrice Onno	01807.002407.	2799

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EXAMINER

YALEW, FIKREMARIAM A

ART UNIT	PAPER NUMBER
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2136

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07/06/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/621,418	Applicant(s) ONNO ET AL.	
	Examiner Fikremariam Yalew	Art Unit 2136	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04/30/2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>07/17/2007</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The office action is in reply to an amendment filed on 04/30/2007. Claims 1-35 have been amended. Claims 1-35 are pending.
2. The Examiner withdrawal 35 USC 101 rejections based on the applicant amendment and also withdrawal the claim objection.
3. The references listed in the IDS filed on July 18 2003 have been considered by the examiner.

Response to Arguments

4. Applicant's arguments with respect to claim 1-35 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Katayama et al (hereinafter referred as Katayama) in view of Wee(hereinafter referred as Wee) US 7,184,548 B2.

7. As per claim 1,18,28,30,32,34: Katayama teaches a method/apparatus/computer program/device of a digital signal comprising the steps of: decomposing the signal into several regions each containing digital data (0022(i.e., separating the audio signal)); encoding the signal in a format comprising header data specific to each region and which comprise at least one part representing the amplitude of the data of the region considered (See 0022 (i.e. each signal have specific frequency band) and Fig 4a steps 401,402);

Katayma does not explicitly teach modifying among the header data specific to at least one region of the signal, the part of the header data representing the amplitude of the data of the region considered.

However Wee teaches modifying among the header data specific to at least one region of the signal, the part of the header data representing the amplitude of the data of the region considered (See col 16 line 56 through col 17 line 19 and Fig 20).

Therefore it would have been obvious to one ordinary skill in the art at the time the invention was made to modify the teaching method of Katayam to include modifying among the header data specific to at least one region of the signal, the part of the header data representing the amplitude of the data of the region considered. This modification would have been obvious because a person having ordinary skill in the art would have been motivated to do so, as suggested by, (See Wee col 3 lines 42-44) in order to provide secure and scalable encoding method for use in streaming of data.

8. As claim 2,19: the combination of Katayma and Wee teach a method wherein the digital data of the signal are digital samples representing physical quantities, and (See

Wee col 5 lines 54-67), the part of the header data representing the amplitude of the samples of the region considered provides a number of bitplanes according to which the amplitudes of the samples are encoded based on the difference between (1)a number of so-called reference bitplanes, depending on the signal and which is deduced from information present in the signal and(2)a number of zero bitplanes which is contained in said part of the header data(See Wee col 16 line 56 through col 17 line 19 and col 7 lines 31-47,col 8 lines 39-61).

9. As per claim 3,20: the combination of Katayma and Wee teach a method wherein said modifying step includes providing for modifying the number of zero bitplanes (See Wee col 16 line 56 through col 17 line 19 and col 7 lines 31-47,col 8 lines 39-61)

10. As per claim 4, 21: the combination of Katayma and Wee teach a method wherein said modifying step includes providing for increasing the number of zero bitplanes (See Wee col 16 line 56 through col 17 line 19 and col 7 lines 31-47,col 8 lines 39-61).

11. As per claim 5,14,22: the combination Katayma and Wee teach a method wherein said modifying step includes making use of at least one transformation key Ku (See Wee 0047-0048,0118 and Fig 5 step 503)

12. As per claim 6,15,23: the combination of Katayma and Wee teach a method wherein the transformation key Ku depends on the at least one region considered. (See Wee 0047-0048,0118 and Fig 5 step 503).

13. As per claim 7,16,24: the combination of Katayma and Wee teach a method wherein said modifying step involves in particular the generation of a pseudo-random

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sequence based on the transformation key Ku (See Wee 0047-0048,0118 and Fig 5 step 503).

14. As per claim 8,17,25: the combination of Katayma and Wee teach a method wherein it comprises a step of transmitting the transformation key Ku (See Wee 0047-0048,0118 and Fig 5 step 503).

15. As per claim 9: the combination of Katayma and Wee teach a method wherein it comprises a step of transmitting the signal so transformed (See Wee 0047-0048,0118 and Fig 5 step 503).

16. As per claims 10,27,29,31,33,35: Katayma teaches a method/device/computer program of descrambling a digital signal decomposed into a plurality of regions each containing digital data, the signal being encoded in a format comprising header data specific to each region and which comprise at least one part representing the amplitude of the data of the region considered, the method comprising the steps of: receiving the signal of which the part of the header data representing the amplitude of the data of at least one region has undergone a modification before transmission of said signal(See 0022).

Katayma does not explicitly teach modifying in reverse that modified part of the header data in order to restore said unmodified part of the header data of the signal.

However Wee teaches modifying in reverse that modified part of the header data in order to restore said unmodified part of the header data of the signal. (See col 16 line 56 through col 17 line 19 and Fig 20).

Therefore it would have been obvious to one ordinary skill in the art at the time the invention was made to modify the teaching method of Katayama to include modifying in reverse that modified part of the header data in order to restore said unmodified part of the header data of the signal. This modification would have been obvious because a person having ordinary skill in the art would have been motivated to do so, as suggested by, (See Wee col 3 lines 42-44) in order to provide secure and scalable encoding method for use in streaming of data.

17. As per claim 11: the combination of Katayama and Wee teach a method wherein the digital data of the signal being digital samples representing physical quantities, (See Wee col 5 lines 54-67) and the part of the header data representing the amplitude of the samples of the region considered provides a modified number of bitplanes according to which the amplitudes of the samples are encoded based on the difference between (1) a number of reference bitplanes, depending on the signal and which is deduced from information present in the signal and, (2) a modified number of zero bitplanes which is contained in the part of the header data (See Wee col 16 line 56 through col 17 line 19 and col 7 lines 31-47, col 8 lines 39-61).

19. As per claim 12: the combination of Katayama and Wee teach a method wherein said step of reverse modifying provides for modifying the modified number of zero bitplanes (See Wee col 16 line 56 through col 17 line 19 and col 7 lines 31-47, col 8 lines 39-61).

20. As per claim 13: the combination of Katayama and Wee teach a method wherein said step of reverse modifying provides for reducing the modified number of zero

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bitplanes (See Wee col 16 line 56 through col 17 line 19 and col 7 lines 31-47,col 8 lines 39-61).

21. As per claim 26: the combination of Katayma and Wee teach a device further comprising means for transmitting the signal so scrambled. (See Wee 0047-0048,0118 and Fig 5 step 503)

Conclusion

22. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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23. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fikremariam Yalew whose telephone number is 5712723852. The examiner can normally be reached on 9-5.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Moazzami Nasser, can be reached on 5712738300. The fax phone number for the organization where this application or proceeding is assigned is 571-272-4195.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Fikremariam Yalew
06/28/2007
FA

Art Unit 2136

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6,28,07